

**Cut School Building  
Energy Costs**



**Teach Grades 4-8  
Energy Education**

## With the **Keystone Energy Education Program**

The Pennsylvania Department of Environmental Protection is proud to announce an initiative:

### **Keystone Energy Education Program (KEEP)**

#### **WHAT IS KEEP?**

KEEP focuses on teaching about and tracking energy efficiency in school buildings and homes.

Teachers receive a full day of classroom lessons and activities, and a tote full of materials.

Administrators and Facilities Managers are introduced to the FREE Energy Star Portfolio Manager.

**THERE IS NO COST FOR THIS PROGRAM!**

#### **WORKSHOP HIGHLIGHTS**

In addition to receiving **curriculum aligned with state core and academic standards, seven Act 48 credit hours** will be awarded to attendees.

Each workshop focuses on Pennsylvania-specific topics, including:

- Energy basics, generation and usage, efficiency and sustainability
- Energy conservation, futures and career development
- Benchmarking the school building using Energy Star Portfolio Manager
- Developing and implementing a school-centered energy conservation plan



#### **WORKSHOP INFORMATION**

##### **When**

Tuesday, May 20, 2014

8 am - 4 pm

*Register by Tuesday, May 13, 2014*

##### **Where**

Juniata College  
von Liebig Center for Science  
1098 Neff Lecture Hall  
1700 Moore Street  
Huntingdon, PA 16652

##### **How to Register/**

##### **For more Information**

Email: [KEEP@energy-workshops.org](mailto:KEEP@energy-workshops.org)

Web: [keep5-20-14.eventbrite.com](http://keep5-20-14.eventbrite.com)

Phone: (412) 431-1010

Fax: (412) 431-5214

# Keystone Energy Education Program Workshops

Join the Pennsylvania Department of Environmental Protection and its partners for a **FREE** Keystone Energy Education Program (KEEP) to be held on the following dates and locations (select any one):

- **February 24, 2014:** Winnie Palmer Nature Reserve, St. Vincent College, 744 Walzer Way, Latrobe; *Environmental Learning Center Barn/Lower Level Classroom*
- **March 5, 2014:** Wilkes University, 84 West South Street, Wilkes-Barre; *Wilkes University Science Building*
- **March 6, 2014:** Penn State University, West College Avenue, University Park; *309 Sackett Building*
- **March 25, 2014:** Montgomery County Intermediate Unit, 1605 West Main Street, Norristown; *Conference Room B3/B4*
- **April 22, 2014:** Asbury Woods Nature Center, 4105 Asbury Road, Erie; *Maple/Oak Classroom*
- **April 24, 2014:** Bradford County Cooperative Extension, 200 Main Street (Suite 3), Towanda; *Main/Secondary Conference Rooms*
- **May 20, 2014:** Juniata College, 1700 Moore Street, Huntingdon; *von Liebig Center for Science, 1098 Neff Lecture Hall*

The workshops will be held from 8:30 a.m. – 4:00 p.m. KEEP focuses on teaching about and tracking energy efficiency in school buildings and homes. Interested schools may attend the workshop as a “building team.”

**Each building team may include any or all of the following:**

- Teachers (grades 4-8, or other grades)
- School administrator or designee
- Building maintenance or facility manager or designee

Workshop participants will learn about and explore energy conservation, efficiency, energy basics, career development, student energy teams, benchmarking the school building using the **free** Energy Star Portfolio Manager program and more. Educators will receive background information, 7.0 Act 48 credit hours and standards-based curricular materials.

## Workshop Registration Form

Email to: [KEEP@energy-workshops.org](mailto:KEEP@energy-workshops.org) or FAX (412) 431-5214 or CALL (412) 431-1010

Workshop Date: \_\_\_\_\_ Location: \_\_\_\_\_  
School: \_\_\_\_\_  
District: \_\_\_\_\_ County: \_\_\_\_\_  
Address: \_\_\_\_\_ City: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
Phone: (\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_  
Special needs? \_\_\_\_\_

### OPTIONAL SCHOOL INFORMATION—any or all of the following may attend—Administrator, Facility Manager, or Teachers

Administrator Name: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_  
Professional Personnel Identification Number: \_\_\_\_\_

Facility Manager's Name: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_

Teacher Name: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_ Grade: \_\_\_\_\_  
Professional Personnel Identification Number: \_\_\_\_\_

Teacher Name: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_ Grade: \_\_\_\_\_  
Professional Personnel Identification Number: \_\_\_\_\_

Teacher Name: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_ Grade: \_\_\_\_\_  
Professional Personnel Identification Number: \_\_\_\_\_

## **The Pennsylvania Department of Environmental Protection announces its new K-12 initiative, Keystone Energy Education Program (KEEP).**

### **WHAT?**

The Keystone Energy Education Program will focus on teaching about and tracking energy efficiency in the school building and in the homes of the community.

- School building team will include:
  - three teachers from grades 4-8
  - an administrator and
  - a building maintenance manager
  - full teams are encouraged to attend the workshop
- A full day energy workshop agenda will focus on Pennsylvania-specific topics, including:
  - Energy fundamentals and impacts
  - Energy extraction technologies
  - Electricity generation technologies, including geologic resource extraction and renewable resources
  - Transportation fuels, including alternative fuel vehicles and fueling
  - Energy career development
  - Energy conservation, efficiency and sustainability
  - Benchmarking the school building using Energy Star Portfolio Manager
  - Developing and implementing student energy conservation teams
- The energy curriculum will be in alignment with Pennsylvania's Academic Standards and Assessment Anchors for Environment and Ecology, Science and Technology and Engineering Education and Mathematics, along with other related standards, such as Civics, Government, Language Arts or Geography.
- Seven Act 48 credit hours will be awarded to attendees

### **WHEN?**

Workshops will be offered during the 2013-2014 school year.

- Registration will be on a First Come ... First Served basis.

### **WHERE?**

Each of DEP's six (6) regions: Pittsburgh, Indiana, Philadelphia, West Chester, Harrisburg, Huntingdon, Erie, Clarion, State College, Williamsport, Wilkes-Barre and Stroudsburg will host two (2) workshops. Six school-building teams can attend each workshop.

- We will enroll 12 school buildings per region this coming 2013-2014 school year)
- Pennsylvania's public, charter and parochial schools are eligible to be included in the seventy two (72) school-building teams.

### **WHY?**

Energy education is important for children, teachers and families.

- Learn the importance of saving natural resources; the economics of using various energy sources; the value of clean energy for our environment.
- Enable the school district to operate the school building more economically and save taxpayer dollars on utility costs.

### **HOW?**

To enroll or find out more information:

Susan E. Gove, Ph.D.

Keystone Energy Education Program (KEEP) Coordinator

412-431-1010

[KEEP@energy-workshops.org](mailto:KEEP@energy-workshops.org)

## School Energy Team Education Administrator-Teacher-Facilities Manager Workshop Agenda for Grades 4-8

**Goal:** To provide age-appropriate energy education to middle school teams via introduction of several highly interactive school and home activities that demonstrate and encourage energy savings.

**Objectives:**

- To be able to teach engaging lessons that demonstrate the differences between renewable and non-renewable energy sources.
- To be able to discuss the pros and cons of uses of at least three energy sources.
- To be able to develop the energy saving plan for the school using the Energy Star Portfolio Manager in the school and energy saving strategies in students' homes.
- To be able to discuss career paths to several professions in the energy field.
- To be able to explain how the lessons today can be incorporated into the attendee's typical classroom schedule regardless of grade or subject.

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8:00 – 8:15      **Registration / Data Collection**

8:15 – 9:00      **Introductions, Overview of the Day, Ice Breaker**

9:00 – 9:15      **Overview of Energy Usage in US & PA**

9:15 – 9:30      **Energy Education is a Multi-Discipline Subject /  
Correlating Learning to PA Core & State Standards**

9:30 – 12:00      **Teachers Only**

- **Energy Fundamentals: Renewables & Non-renewables**
- **Energy Capture & Transmission**

**Administrator & Facilities Manager Only**

- **Energy Star Portfolio Manager: Overview and Implementation Plan for your school**

12:00 – 12:45      **Lunch (Possible tour depending on facility)**

12:45 – 2:30      **Energy Career Development**

- **Energy Futures**
- **Energy Usage & Conservation**

2:30 – 3:30      **Building Your Energy Teams / Achieving Results**

3:30 – 4:00      **Next Steps: Implementation, Coaching, Succeeding**

**Note:** This is a standard schedule, but may be adjusted based on special features available in the venue which may be used to enhance learning and on content experts available to participate in the workshop.